

CLAIMS:

What is claimed is:

- 1 1. A method in a data processing system for maintaining
2 data integrity in logs, the method comprising:
3 reviewing a log;
4 determining whether the log contains a data loss;
5 and
6 adding data to replace the data loss in the log to
7 increase integrity of the log if a determination is made
8 that a data loss has occurred.
- 1 2. The method of claim 1, wherein the log includes a
2 set of time segments and wherein the determining step
3 comprises:
4 analyzing each time segment within set of time
5 segments to determine whether a time segment gap
6 tolerance has been exceeded.
- 1 3. The method of claim 1, wherein the data added to
2 replace the data loss comprises data derived from a prior
3 log.
- 1 4. The method of claim 1, wherein the data added to
2 replace the data loss comprises data derived from a set
3 of prior logs.

1 5. The method of claim 1, wherein the log includes data
2 indicating at least one of hits, requests, page views,
3 and sessions.

1 6. The method of claim 2, wherein the analyzing step
2 includes considering data in at least one time segment
3 adjacent to a time segment being analyzed.

1 7. The method of claim 1, wherein the log is a Web
2 server log.

1 8. A method in a data processing system for analyzing a
2 log, the method comprising:
3 analyzing a set of time segments in the log to
4 determine whether a time gap tolerance has been exceeded
5 for a time segment within the set of time segments; and
6 responsive to a determination that the time gap
7 tolerance has been exceeded for the time segment within
8 the set of time segments, generating an alert.

1 9. The method of claim 8 further comprising:
2 responsive to detecting the alert, adding data to
3 time segment to increase the data integrity of the log.

1 10. The method of claim 8, wherein the alert is
2 presented on a user interface.

1 11. The method of claim 8, wherein the alert is a flag
2 used by a program to process the log.

1 12. The method of claim 8 further comprising:
2 calculating a data integrity level for the log.

1 13. The method of claim 8, wherein the set of time
2 segments include data for at least one of hits, requests,
3 page views, and sessions.

1 14. A data processing system comprising:
2 a bus system;
3 a communications unit connected to the bus system;
4 a memory connected to the bus system, wherein the
5 memory includes a set of instructions; and
6 a processing unit connected to the bus system,
7 wherein the processing unit executes the set of
8 instructions to review a log; determine whether the log
9 contains a data loss; and add data to replace the data
10 loss in the log to increase integrity of the log if a
11 determination is made that a data loss has occurred.

1 15. A data processing system comprising:
2 a bus system;
3 a communications unit connected to the bus system;
4 a memory connected to the bus system, wherein the
5 memory includes a set of instructions; and
6 a processing unit connected to the bus system,
7 wherein the processing unit executes the set of
8 instructions to analyze a set of time segments in the log
9 to determine whether a time gap tolerance has been

10 exceeded for a time segment within the set of time
11 segments; and generate an alert in response to a
12 determination that the time gap tolerance has been
13 exceeded for the time segment within the set of time
14 segments.

1 16. A data processing system for maintaining data
2 integrity in logs, the data processing system comprising:
3 reviewing means for reviewing a log;
4 determining means for determining whether the log
5 contains a data loss;
6 adding means for adding data to replace the data
7 loss in the log to increase integrity of the log if a
8 determination is made that a data loss has occurred.

1 17. The data processing system of claim 16, wherein the
2 log includes a set of time segments and wherein the
3 determining means comprises:
4 means for analyzing each time segment within set of
5 time segments to determine whether a time segment gap
6 tolerance has been exceeded.

1 18. The data processing system of claim 16, wherein the
2 data added to replace the data loss comprises data
3 derived from a prior log.

1 19. The data processing system of claim 16, wherein the
2 data added to replace the data loss comprises data
3 derived from a set of prior logs.

1 20. The data processing system of claim 16, wherein the
2 log includes data indicating at least one of hits,
3 requests, page views, and sessions.

1 21. The data processing system of claim 17, wherein the
2 analyzing means includes considering data in at least one
3 time segment adjacent to a time segment being analyzed.

1 22. The data processing system of claim 16, wherein the
2 log is a Web server log.

1 23. A data processing system for analyzing a log, the
2 data processing system comprising:
3 analyzing means for analyzing a set of time segments
4 in the log to determine whether a time gap tolerance has
5 been exceeded for a time segment within the set of time
6 segments; and
7 generating means, responsive to a determination that
8 the time gap tolerance has been exceeded for the time
9 segment within the set of time segments, for generating
10 an alert.

1 24. The data processing system of claim 23 further
2 comprising:
3 adding means, responsive to detecting the alert, for
4 adding data to time segment to increase the data
5 integrity of the log.

1 25. The data processing system of claim 23, wherein the
2 alert is presented on a user interface.

1 26. The data processing system of claim 23, wherein the
2 alert is a flag used by a program to process the log.

1 27. The data processing system of claim 23 further
2 comprising:
3 calculating means for calculating a data integrity
4 level for the log.

1 28. The data processing system of claim 23, wherein the
2 set of time segments include data for at least one of
3 hits, requests, page views, and sessions.

1 29. A computer program product in a computer readable
2 medium for maintaining data integrity in logs, the
3 computer program product comprising:
4 first instructions for reviewing a log;
5 second instructions for determining whether the log
6 contains a data loss; and
7 third instructions for adding data to replace the
8 data loss in the log to increase integrity of the log if
9 a determination is made that a data loss has occurred.

1 30. The computer program product of claim 29, wherein
2 the log includes a set of time segments and wherein the
3 second instructions comprises:

4 sub-instructions for analyzing each time segment
5 within set of time segments to determine whether a time
6 segment gap tolerance has been exceeded.

1 31. The computer program product of claim 29, wherein
2 the data added to replace the data loss comprises data
3 derived from a prior log.

1 32. The computer program product of claim 29, wherein
2 the data added to replace the data loss comprises data
3 derived from a set of prior logs.

1 33. The computer program product of claim 29, wherein
2 the log includes data indicating at least one of hits,
3 requests, page views, and sessions.

1 34. The computer program product of claim 30, wherein
2 the sub-instructions includes considering data in at
3 least one time segment adjacent to a time segment being
4 analyzed.

1 35. The computer program product of claim 29, wherein
2 the log is a Web server log.

1 36. A computer program product in a computer readable
2 medium for analyzing a log, the computer program product
3 comprising:

4 first instructions for analyzing a set of time
5 segments in the log to determine whether a time gap

6 tolerance has been exceeded for a time segment within the
7 set of time segments; and
8 second instructions, responsive to a determination
9 that the time gap tolerance has been exceeded for the
10 time segment within the set of time segments, for
11 generating an alert.

1 37. The computer program product of claim 36 further
2 comprising:

3 third instructions, responsive to detecting the
4 alert, for adding data to time segment to increase the
5 data integrity of the log.

1 38. The computer program product of claim 36, wherein
2 the alert is presented on a user interface.

1 39. The computer program product of claim 36, wherein
2 the alert is a flag used by a program to process the log.

1 40. The computer program product of claim 36 further
2 comprising:

3 third instructions for calculating a data integrity
4 level for the log.

1 41. The computer program product of claim 36, wherein
2 the set of time segments include data for at least one of
3 hits (i.e., requests), page views, and sessions.